# HCC-4 siRNA (h): sc-39353



The Power to Question

## **BACKGROUND**

The human beta cytokine HCC-4 (also designated small inducible cytokine A16, IL-10 inducible chemokine, Chemokine CC-4, NCC-4, liver expressed chemokine, LEC, LMC, Monotactin-1, MTN-1, lymphocyte and monocyte chemoattractant, or LCC-1) displays chemotactic activity for monocytes and dendritic cells. HCC-4 maps to chromosome 17q12 where three other CC chemokines, MPIF-1, HCC-2, and HCC-1 are clustered within a region which is 40 kb long. HCC-4 expression is uniquely upregulated by IL-10 and demonstrates chemotactic activity for monocytes. The ability of HCC-4 to markedly improve recognition of poorly immunogenic cells suggests that it could be an effective component of antitumor vaccines.

# **REFERENCES**

- Hedrick, J.A., Helms, A., Vicari, A. and Zlotnik, A. 1998. Characterization of a novel CC chemokine, HCC-4, whose expression is increased by interleukin-10. Blood 91: 4242-4247.
- Shoudai, K., Hieshima, K., Fukuda, S., Iio, M., Miura, R., Imai, T., Yoshie, O. and Nomiyama, H. 1998. Isolation of cDNA encoding a novel human CC chemokine NCC-4/LEC. Biochim. Biophys. Acta 1396: 273-277.
- Youn, B.S., Zhang, S., Broxmeyer, H.E., Antol, K., Fraser, M.J., Jr., Hangoc, G. and Kwon, B.S. 1998. Isolation and characterization of LMC, a novel lymphocyte and monocyte chemoattractant human CC chemokine, with myelosuppressive activity. Biochem. Biophys. Res. Commun. 247: 217-222.
- Nomiyama, H., Fukuda, S., Iio, M., Tanase, S., Miura, R. and Yoshie, O. 1999. Organization of the chemokine gene cluster on human chromosome 17q11.2 containing the genes for CC chemokine MPIF-1, HCC-2, HCC-1, LEC, and RANTES. J. Interferon Cytokine Res. 19: 227-234.
- Giovarelli, M., Cappello, P., Forni, G., Salcedo, T., Moore, P.A., LeFleur, D.W., Nardelli, B., Carlo, E.D., Lollini, P.L., Ruben, S., Ullrich, S., Garotta, G. and Musiani, P. 2000. Tumor rejection and immune memory elicited by locally released LEC chemokine are associated with an impressive recruitment of APCs, lymphocytes, and granulocytes. J. Immunol. 164: 3200-3206.

# CHROMOSOMAL LOCATION

Genetic locus: CCL16 (human) mapping to 17q12.

# **PRODUCT**

HCC-4 siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10  $\mu M$  solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see HCC-4 shRNA Plasmid (h): sc-39353-SH and HCC-4 shRNA (h) Lentiviral Particles: sc-39353-V as alternate gene silencing products.

For independent verification of HCC-4 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-39353A, sc-39353B and sc-39353C.

## **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

#### STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330  $\mu$ l of the RNAse-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNAse-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## **APPLICATIONS**

HCC-4 siRNA (h) is recommended for the inhibition of HCC-4 expression in mouse cells.

#### **SUPPORT REAGENTS**

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

## **RT-PCR REAGENTS**

Semi-quantitative RT-PCR may be performed to monitor HCC-4 gene expression knockdown using RT-PCR Primer: HCC-4 (h)-PR: sc-39353-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com